



## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 62931	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/050903	International filing date (day/month/year) 27 novembre 2003 (27.11.2003)	Priority date (day/month/year) 28 novembre 2002 (28.11.2002)
International Patent Classification (IPC) or national classification and IPC G06F 3/033		
Applicant	THALES	

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 21 juin 2004 (21.06.2004)	Date of completion of this report 25 April 2005 (25.04.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/050903

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

 the international application as originally filed the description:

pages 1-6, as originally filed

pages , filed with the demand

pages , filed with the letter of

 the claims:

pages 1-6, as originally filed

pages , as amended (together with any statement under Article 19

pages , filed with the demand

pages , filed with the letter of

 the drawings:

pages 1/2-2/2, as originally filed

pages , filed with the demand

pages , filed with the letter of

 the sequence listing part of the description:

pages , as originally filed

pages , filed with the demand

pages , filed with the letter of

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4.  The amendments have resulted in the cancellation of: the description, pages the claims, Nos. the drawings, sheets/fig5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/EP 03/50903

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1 - 6	YES
	Claims		NO
Inventive step (IS)	Claims	2 - 6	YES
	Claims	1	NO
Industrial applicability (IA)	Claims	1 - 6	YES
	Claims		NO

## 2. Citations and explanations

Reference is made to the following documents:

D1: EP-A-0 340 096 (SFENA) 2 November 1989 (1989-11-02)  
 D2: EP-A-0 345 029 (TALIQ CORP) 6 December 1989 (1989-12-06)

1. As already indicated in the description of the present application, the claimed invention relates to an improvement to the display system with integrated touch-sensitive surface patented in D1 (the priority document of D1 is the French patent FR 88 05665, cited in the application).

Said document D1, which is considered the prior art document closest to the subject matter of claim 1, describes:

A display device, the surface of which is touch-sensitive, wherein said device comprises a first portion including two insulating plates with a layer of material having electro-optical properties capable of making all or part of the surface thereof visible when an electrical control signal is applied, a first electrode being arranged on one

surface of said insulating plates and a second electrode being arranged on a surface of the other insulating plate, opposite at least the first electrode (D1, column 2, lines 32-43), characterised in that the second electrode is used as a sensitive element of the touch-sensitive surface of the device (D1, column 3, lines 25-40) and in that the surface area of the second electrode is larger than the surface area or the sum of surface areas of the first facing electrode(s) (D1, figures 1 and 3, column 4, lines 3-8).

Consequently, there are two differences between the subject matter of claim 1 and the device known from D1.

(a) The first portion of the claimed device is a dedicated portion and the first electrode is in the form of a pictogram.

It is well known to a person skilled in the art that, in display devices using an electro-optical material, the dedicated technique and the active matrix technique are interchangeable, even though each of these two techniques has a certain advantage over the other. This opinion is confirmed by the description of the present application (page 1, line 33 to page 2, line 6) and document D2 (column 5, lines 37-60). For this reason, a person skilled in the art would certainly also consider using the dedicated display technique rather than the active matrix type. Consequently, these features do not confer an inventive step to the claimed device.

It should be noted that the description of the

present application (page 1, line 33 to page 2, line 11) mentions certain problems with regard to applying the principle known from D1 to a dedicated display device. In particular, it is indicated that the size of the counter-electrodes cannot simply be adjusted to the dedicated pictograms. However, it is clear from D1 that the shape of the counter-electrode is not identical with that of a first electrode, but can be selected on the basis of the required detection resolution (D1, column 2, lines 52-60). It is also indicated in D1 that the interstices between the counter-electrodes should be as small as possible (D1, column 3, lines 1-6) to avoid reducing the display resolution. However, in a dedicated device, this problem does not arise, since the spacing between the first electrodes is considerably larger than that between the pixels of a display device such as that described in D1.

(b) It is specified that the second electrode of the claimed device has a surface area of 9 mm<sup>2</sup>.

It has already been indicated in D1 (column 2, lines 56-58) that the surface area of said electrode should be determined on the basis of the required detection resolution. It is therefore clear to a person skilled in the art that the surface area should be selected on the basis of the sensitivity of the detection system, and also of the surface area of the object to be used for contacting the touch-sensitive surface. For this reason, the surface area cannot be selected arbitrarily, but derives automatically from the parameters indicated above. Therefore, the feature whereby the second electrode has a surface area of 9 mm<sup>2</sup> does not

confer an inventive step to the first claim.

Consequently, the first claim does not meet the requirements of PCT Article 33(3), since it does not involve an inventive step.

2. It appears that the combination of features of claims 1 and 2 is not contained in the prior art and cannot be derived in an obvious manner therefrom.

In particular, although contouring the second electrode facing the supply region of the first electrode(s) appears to be a simple solution to the problem of ghost images, the documents cited in the search report do not provide any indication to that effect for a person skilled in the art. Document D1, on the other hand, proposes a different solution (D1, column 2, line 61 to column 3, line 6).

Consequently, a new independent claim including the features of claims 1 and 2 would meet the requirements of PCT Article 33.